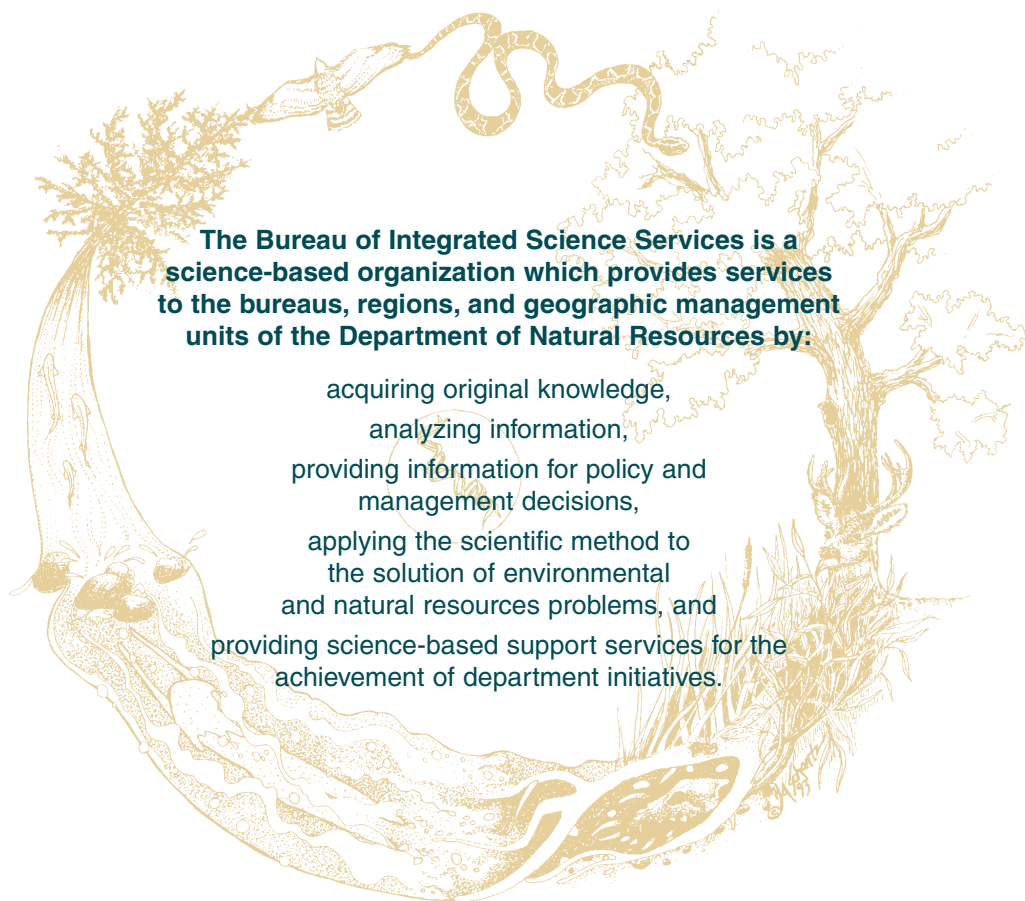




SCIENCE SUPPORTING DECISIONS

2001-2003
Biennial Report

Wisconsin Department of Natural Resources
Bureau of Integrated Science Services



The Bureau of Integrated Science Services is a science-based organization which provides services to the bureaus, regions, and geographic management units of the Department of Natural Resources by:

acquiring original knowledge,
analyzing information,
providing information for policy and
management decisions,
applying the scientific method to
the solution of environmental
and natural resources problems, and
providing science-based support services for the
achievement of department initiatives.

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From the Director's Desk...

"Science Supporting Decisions" highlights some of the activities undertaken by the Bureau of Integrated Science Services over the past biennium. The report focuses on two key themes: Science and Services. It mentions significant research accomplishments and shows how our services support a wide range of stakeholders.

Agency administrators created the Bureau of Integrated Science Services in 1996 as part of an agency-wide reorganization by merging the former bureaus of Environmental Analysis and Review and Research with the Office of Technical Services. Today, the bureau is a centrally directed¹ organization providing "one-stop shopping" for a wide range of services specifically aligned with the DNR's mission and strategic plan. The DNR is a science-based agency and Science Services provides much of the science for its decisions!

Well-planned research has a significant payoff for the DNR and its customers. Unfortunately, the continuously expanding and changing frontier of scientific discovery sometimes hides these payoffs. In addition, the challenges associated with environmental research evolve rapidly in response to scientific discovery and technological breakthrough, as well as to current and projected human and ecological needs. The recent identification of chronic wasting disease in Wisconsin's white-tailed deer herd and the State's current budget crisis illustrate this reality well.

Environmental decision-making involves making difficult choices about resource allocation, both in the present and across future generations. Science Services plays a vital role in the DNR's decision making. Science that supports adaptive decision-making has been especially valuable. Observation, statistical and probabilistic assessment, and carefully monitored experimentation based on active cooperation among researchers, decision-makers, and affected communities are hallmarks of our approach.

Aside from its solid research program, Science Services certifies laboratories that conduct environmental tests. We work closely with the State Laboratory of Hygiene to provide laboratory services to department staff, including soil, water, and waste testing for environmental programs. We also ensure that operators of the state's waste disposal infrastructure have training and are certified.

Land use decisions made today will affect many of the most important, long-term environmental issues likely to face Wisconsin citizens. Our staff works with landowners, developers, and local governments to help guide development patterns that maintain Wisconsin's character and minimize negative environmental effects. Through a Cooperative Agreement, our Environmental Analysis and Review staff works closely with the Department of Transportation to minimize impacts of transportation projects. The program also ensures compliance with Wisconsin's Environmental Policy Act by coordinating environmental reviews.

Much of the work that Science Services does is "behind the scenes." For example, our staff completes biological inventories, coordinates statewide wildlife surveys, administers Environmental Damage Compensation programs, collects and manages a variety of environmental fees, maintains the Toxics Release Inventory, develops guidance for wetland mitigation programs, provides library services, consults on statistical questions and research methods, and oversees quality assurance efforts.

We strive to rapidly transfer new knowledge to the field. Unfortunately, the volume of new science information, some of which may appear conflicting, or may change as our understanding evolves, occasionally overwhelms and confuses recipients. Building close relationships between administrators, managers, and scientists is a particularly effective way of addressing these concerns. Solid relationships and networks improve the value of publications and other technology transfer materials. Such relationships, however, also challenge our science professionals to maintain high standards of objectivity while functioning in closer proximity to decision-making and policy-formulating processes.

Our program outcomes include knowledge, methods, and new technologies that enable solutions to critical environmental problems. The work conducted by Science Services helps ensure sound decisions for both resource management and environmental quality programs, and ultimately, for human health and the environment.



John R. Sullivan, Director

¹ The Environmental Analysis and Liaison program staff are decentralized and supervised in regional offices.

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